1934

TRAILSIDE TRANSFORMATION

THE NATURE TRAILS AND TRAILSIDE MUSEUMS AT BEAR MOUNTAIN, N. Y.

WILLIAM H. CARR

ASSISTANT CURATOR, DEPARTMENT OF EDUCATION CHIEF NATURALIST, PALISADES INTERSTATE PARK



SCHOOL SERVICE SERIES, NUMBER TEN
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Department of Education

THE AMERICAN MUSEUM OF NATURAL HISTORY
77th STREET AND CENTRAL PARK WEST
NEW YORK, N. Y.

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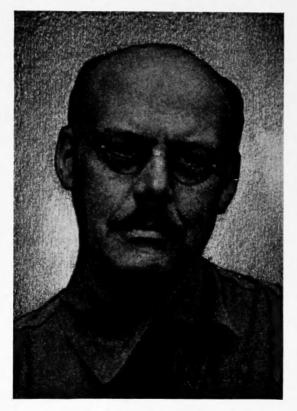
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Benjamin Talbot Babbitt Hyde¹ November 23, 1872—July 27, 1933.

Mr. Hyde, affectionately known to thousands as "Uncle Bennie," was the pioneer in nature education in the Palisades Interstate Park, where he established the first out-of-door museum in this region in 1920.

¹This photograph is an enlargement from a group picture. "Uncle Bennie" was seated, with his arm upon the shoulder of the person next to him; thus the raised left shoulder.

AN INTERPRETER OF NATURE

A green expanse of leaves—oak, sassafras, and witch-hazel—banked beside blue waters, greeted "Uncle Bennie" when he first came to the Kanawauke Lake region of the beautiful Palisades Interstate Park, in 1920. Baltimore orioles whistled in trees near the broad-spanned pavilion that was soon to cover the "Boy Scout Museum." This tall, friendly naturalist caught blacksnakes on nearby hills and used them for lecture purposes to impress upon people the fact that serpents were fascinating animals, not fabulous monsters in disguise. He observed the ways of beaver in Pine Swamp, spending night after night in quiet, purposeful contemplation near the dwellings of the animal engineers so that he might, by example, encourage others to follow in his footsteps. His unselfish purpose was to share the delights of the woods and fields with persons less fortunate than he in both opportunity to see and ability to translate sights and sounds into the language of everyday life and living.

"Uncle Bennie" was an inspired teacher and guide to thousands of children and adults. When visitors came beneath his spell, they never forgot him. His pioneer efforts in nature education eventually resulted in the establishment of many similar undertakings throughout the land. Natural history instructors from virtually every State in the Union came to see what he had built, and called it good. "Uncle Bennie" was a constructive leader. His museum was a laboratory where every guest was an experimenter, where visitors, young and old, were invited to participate in numerous interesting activities such as mounting butterflies, examining objects through the microscope, preparing mineral specimens, and a host of other projects. By means of live exhibits and physical and mental action, he transformed passive, visual education into the realm of happily shared personal experience.

"Uncle Bennie's" influence will be exerted for years to come in many places throughout the country wherever his disciples carry on. Teachers who knew him not are also engaged in the very work for which he was so largely responsible. He was a modest, honest and straightforward man who sought no undue credit; who made no claims to priority for his achievements. He met difficulties with a tolerant smile and surmounted obstacles that would have discouraged a lesser man. His story is still being written.—WILLIAM H. CARR.



Photograph by Wilfred Miller

SIGNS AS NATURE GUIDES

The Nature Trails, extending for two and one half miles, are divided into five sections. The first is the main, or general trail, where plants, rocks and other natural objects are labeled. The second is a Botanical Trail; the third a Geology Trail, and the fourth the Acorn Trail, where the guest is provided with a mimeographed sheet containing information relating to numbers upon the signs. The Historical Trail is the fifth.

FOREWORD

The almost universal use of the automobile and the improvement in other means of transportation is taking hundreds of thousands of city people into the country. This has created a desire to know more about the objects of nature which they see. The Bear Mountain Nature Trails and Trailside Museums are operated for the benefit of these people.

The project was initiated by the American Association of Museums through the offices of Dr. Hermon C. Bumpus and a grant of the Laura Spelman Rockefeller Foundation, in 1927. The work is maintained jointly by the Commissioners of the Palisades Interstate Park and the American Museum of Natural History. We are pleased to announce that, commencing this year, the institution will remain open throughout the twelve months.

To the Park Commission, through the efforts of Major William A. Welch, General Manager and Chief Engineer, and to Mr. John J. Tamsen, Park Superintendent, we owe our very sincere thanks for the splendid improvements made possible this season. The new work described in this report was accomplished by men employed by the New York State Temporary Emergency Relief Administration, under the supervision of Park engineers and of our naturalist in charge.

Through the interest and generosity of Mr. Felix M. Warburg, a Trustee of the American Museum, we have been able to provide for the personnel of the Trailside Museum and Nature Trails during the past years. The Park Commission is providing the salaries and general assistance for winter operation.

Dr. George H. Sherwood, *Director*, The American Museum of Natural History, 77th Street and Central Park West, New York, N. Y.



Photograph by Wilfred Miller

ARRIVING BY BUS

Schools, colleges, and nature clubs visit the trails and museums in ever increasing numbers. Various educational organizations within a hundred mile radius of Bear Mountain avail themselves of the opportunity to benefit, as one student remarked, "by relaxing and learning at the same time!"

TRAILSIDE TRANSFORMATION

When Thoreau said, "I would rather sit on a pumpkin and have it all to myself, than to be crowded on a velvet cushion," he expressed in homely New England terms the thoughts of many of us. This simple statement explains the urge that sends millions of Americans out of doors to escape the eternal "nearness" that ever crowds life in cities. It helped us to understand the remarks of an elderly gentleman whom we encountered one day upon our Nature Trails. He was seated peacefully upon a shaded rock. His straw hat lay on the moss beside him. As we went by, he remarked upon the invigorating October air and spoke of the actions of a bird he had been watching. "How quiet and restful it is here!" he said, and then, reverently, "Thank God for parks—and for this place!"

He, too, preferred pumpkins!

Experiences of this sort provide great encouragement to extend our efforts within the confines of the Palisades Interstate Park in "bringing Nature to the people, as well as the people to Nature." We have been asked whether or not we ever become "stale" in Trailside Museum work. Our answer is always an instant, emphatic, and sometimes indignant, "No!"

There is no monotony in the lives of those who constantly deal with many phases of Nature and who make earnest efforts to know her creatures. And, as Nature offers infinite variety, so do the human visitors who come to us year in and year out. No, we do not become stale!

More than 350,000 persons visited us during the season. This year we feel that we have played a real and specific part in aiding hundreds of citizens to use their increased leisure time intelligently and wholesomely. We have been in a truly strategic position to observe at first hand that the problem of added and enforced idleness is a very grave and vital one.

We have noticed that many separate movements are afoot for the education of both adults and children during these times of reduced working hours. While there are many "leisure time" plans for large gatherings, there seem to be few for the benefit of individuals. Mass education in this country has reached a state of saturation. There is a growing tendency to reduce unit attendance and to increase opportuni-

ties for learning, to provide added types of educational facilities in new and old fields, and to encourage individuals to seek enlightenment in answer to their own inner desires and aptitudes.

Nature Trails, Historical Trails, and Trailside Museums are admirably adapted to fulfill the requirements of these present day educational policies. In addition, our program, if so it may be called, combines healthy, open-air recreation and exercise with general, informal teaching. At least eighty percent of our visitors come to us as families or as individuals, rather than in large groups.

Our various small buildings, connected as they are by labeled trails, provide walkers with many occasions to pause and read and so become better acquainted with the surrounding countryside and its natural objects. The museums are information concentration points, where the story of out-of-doors is crystallized.

For the past seven years, we have considered ourselves fortunate in being able to develop this Museum project at Bear Mountain. Our physical building equipment was by no means adequate, yet it permitted us to continue our efforts to increase the value and usefulness of our fifty-seven acres. (Accounts in previous reports have told of activities in former years.) The principal factor in any success we may have won has been the never failing support and enthusiasm of Dr. George H. Sherwood, Director of the American Museum of Natural History, and of Dr. Clyde Fisher, Curator of the Department of Education, both of whom first made it possible for us to embark upon Trailside work, and who have stood constantly at our side during times of hardship.

After this happy period of struggle (and it was happy, regardless of discouragements) one may appreciate our feelings when, during the early winter of 1933, we were suddenly showered with riches, in time of great financial depression. Major William A. Welch, General Manager of the Palisades Interstate Park, decided to wave the wand of transformation over our area and literally to change the face of the landscape. Major Welch has always been a staunch supporter of Trailside and has accomplished more than his share in our behalf. Mr. John J. Tamsen, Park Superintendent, another real friend in time of need, put his architects to work, with the result that four stone buildings were speedily designed and the construction commenced. At least seventy men were employed by the Emergency Relief Bureau of New York City.

¹(See page 23).

All original ideas for the presentation of natural history to the visiting public have been strictly followed. The new and valued features have provided added opportunities for public service, in accordance with policies adopted in 1927. Our entrance and concentration points have been vastly improved and the natural wildness of the trails thereby emphasized and enhanced. The new buildings and the landscaping have in no way encroached upon our nature trail area.



Photograph by M. Peter K

CLOSE EXAMINATION

Tripod labels are used beside the trails to give added information. This particular label told of the white pine and of the characteristics of its bark.

The same appeal to "learn by doing" and to "read as you go" still exists, both upon the trails and in the museums. Thanks to exceptionally careful planting along the trails by the Park Forester, Mr. Raymond L. Adolph, the naturalness of the region has, if anything, been greatly improved, for many plants had been trampled upon and destroyed last season.

The inadvertent crushing of growing plants beside the trails was formerly a real problem. To-day, however, we have been able to preserve the grass and smaller plants, thanks to a new system of label placing. No labels are attached to the plants themselves. All labels are wired upon posts and, wherever pos-

sible, are placed directly at the trail's edge. This forms a "fence" that serves to keep visitors strictly to the trail. Those who are interested in the flowers, trees or ferns, as the case may be, find it necessary to follow guiding strings to the plants themselves.

The botanical trails, with changing labels, follow plants through the seasons. The urge to follow trails is in no way discouraged by signs that are designed to blend with the green background. After much experimentation, we have developed a green color that is not offensive to the eye. It is a dark, olive green that closely matches the prevailing shade of the leaves. As in previous years, the nature trails still attract the majority of our visitors, who find supplementary information in the various small museums.

Each succeeding year brings new information, new ideas to our methods of labeling. We are able to clarify sign description and to improve our style of subject presentation. There is scarcely a label on the entire trail system that has not been changed several times during the period of our operation. We have become increasingly aware of the fact that the labels are but footnotes to the main story of description, identification, and appreciation. The museums, through books and visual aids, enlarge upon the story told out-of-doors.

The Trailside automobile approach, at the West Toll House of the Bear Mountain Bridge, was really no approach at all until this year. Rank grass, stubby trees, and the old, green, dilapidated, wooden workshop were about all that could be seen from the highway. The spot had the air of an abandoned farm and owed its appearance to the carelessness of the construction company that built the bridge. Large and small pieces of machinery were left about, wherever they happened to fall. Among other things, we had to rid ourselves of more than forty tons of abandoned iron wheels, anchor chain blocks, etc., etc. Bolts, nails, screws, and other "hardware" littered the entire Craftshouse region. After seeing the grounds as they are today one would never dream that this had been the condition of affairs.

The National Conference on State Parks was held in the Park during the last week in May. Major Welch was anxious to have our buildings and grounds in shape before this occasion. As a result, thirty-one truck loads of sod and plants were in place by May 27th. On the last day of the Conference, when Mrs. Franklin Delano Roosevelt came to unveil the Memorial Plaque to Stephen T. Mather, on Geology Point, we exerted ourselves to the utmost. The

last sods and laurel bushes were in place only an hour before Mrs. Roosevelt and Secretary of the Interior, Harold I. Ickes, arrived.

This was a memorable day for us in more ways than one. The ceremony attendant to the unveiling was held at two o'clock. Everything went smoothly and our distinguished guests were given ample time to inspect the new premises. And, as a climax to the day, one hour after Mrs. Roosevelt left us we experienced the most terrific storm that has ever visited our region during the years of our occupancy! A gale of hurricane force uprooted some of the largest trees upon the trail area.



Photograph by LeRoy Davies

STEPHEN TYNG MATHER MEMORIAL

This bronze plaque, placed upon a boulder on Geology Point, overlooks the beautiful Hudson River. It was dedicated to the memory of Stephen Tyng Mather, first Director of the National Park Service, on May 27, 1933. Mrs. Franklin Delano Roosevelt unveiled the monument and Harold L. Ickes, Secretary of the Interior, spoke at the ceremony. Mr. J. Du Pratt White, President of the New York Commission of the Palisades Interstate Park, presided. The monument was erected at the suggestion of Major William A. Welch, General Manager and Chief Engineer of the Park Commission, and installed under his direction and that of Mr. John J. Tamsen, Park Superintendent.

Mr. Ickes said of Mr. Mather, in part, "His love of nature and humanity," gave to the Nation, "a means of outdoor recreation unequalled in the history of the world."

The wind was accompanied by a cloudburst that flooded our new Craftshouse floor to a depth of four inches.

As a direct result of this storm, strange as it may seem, we doubled the length of our Acorn Trail! Our first Acorn Trail extended down through a beautiful valley, just above the Hudson River.

There were many numbered signs, here and there, that related to trees, rocks, and small plants along the way. During the storm, a huge oak, with three main trunks, at least 130 feet high, crashed down directly upon the main section of this path.

When we discovered the wreckage the next morning, we despaired of ever setting things to rights, for the catastrophe had left a huge gap in the top of the dense, leafy roof which had formerly given heavy shade to the valley. In falling, the oak had bent a hickory tree, some twelve inches in circumference, into a perfect "U" shape. The bark had split but the wood had withstood the strain and had not cracked. The jagged roots of the oak tree stood at right angles to the forest floor, with all sections showing. As we gazed upon those twisted limbs, the thought struck us, "Why not leave this tree where it has fallen? Why not extend the Acorn Trail in such a manner that it will lead the visitor to the roots and along the entire trunk?" And so we did. As a result, this tree now forms the outstanding exhibit along the path site. Thanks to exposed and easily accessible parts, we are able to tell the story of root development, of branching structure, wood resilience—in the case of the twisted hickory—and, incidentally, the story of wind power!

During the spring, with the assistance of Mr. Raymond H. Torrey and Mr. Raymond L. Adolph, we established separately, Moss, Lichen and Lycopodium Gardens. Mr. Torrey, an indefatigable lichen enthusiast, aided us both by his interest and by his ability to collect and identify specimens. We would never have finished the gardens without Mr. Adolph's expert help in collecting materials, particularly mosses. The system of small garden plots will be extended next year. They followed our earlier scheme of concentrating natural objects in one spot to aid students with problems of identification. Some forty species in all were carefully gathered, transplanted and labeled. In the instance of the lichen bed, many hundreds of tiny, individual plants were needed to exhibit the group adequately.

There are many advantages to be gained by maintaining small garden plots. They provide means of mental "check-up" to visitors who have walked the trails and have observed many of the same plants growing naturally along the way. Frequently the guests have come to us

with problems of identification. We have often pointed out that the plant they sought was to be found at some designated spot beside the botany trail.

The answer to this would sometimes be, "Well, I missed it!"

We would then point out the plant in our garden only to hear,

"Oh, I did see that one! I must have failed to read the label. I'll look for it on the way back."

Persons would bring collections of plants, often from a distance of many miles, and with the aid of a book and of the living reference collec-



Photograph by LeRoy Davies

CONCENTRATION GARDENS

Small, carefully tended lichen and moss gardens enabled visitors to identify specimens by means of labels that contained more information than was customary on the trail signs.

tion would proceed to identify their specimens. This method of self-instruction represented real teaching progress. On many occasions, those who brought collections would leave them with us and then wander over the trails, seeking to test their new-found knowledge on the way.

In April, through the kindness of the Reverend Charles P. Bispham of Suffern, N. Y., we held a conference with Governor Herbert H. Lehman and with Conservation Commissioner Lithgow Osborne.

As a result of this meeting, we secured a State Forest

Demonstration for our area. This exhibit consisted of 24,000 three-year-old evergreens of six species, and included a large bed of larch trees as well. The nursery attracted many persons and proved a valuable addition to our growing botanical collection. Through the forethought of Major Welch and of the Park Commission, we shall soon be able to present the plant story in a most satisfactory way. In October the Park



Photograph by Wilfred Miller

THROUGH THE DOORWAY

People come and go. What do they learn? How are they benefitted? Although we can seldom answer these questions definitely, there is no doubt in our minds that visitors profit, for they are given countless opportunities to see, and to know by seeing.

commenced the erection of a botanical museum, to be equipped with a glass roof, floor drains, and other details necessary for the projected display. More than one season will be required before the exhibits in the new museum are completed. Eventually, we shall be equipped to give a somewhat rounded story to those who are interested in the flora of the Hudson Highlands.

The forest demonstration nursery served a very interesting purpose

that did not occur to us during the period of installation. Shortly after the work was completed, on a busy Sunday afternoon we stood nearby to note the reactions of visitors. A group of young people came along, saw the nursery, read the signs aloud, and then one youth said:

"I suppose they do have to plant these things! They must be worth something. I'll bet the trees along those paths are worth something too,



Photograph by LeRoy Davies

TRAILSIDE GEOLOGY MUSEUM

Thanks to the erection of this new building, we have been able to tell the story of local geology and mineralogy to far greater advantage than ever before. One third of the structure is used as a laboratory. The new bird house, built especially for "Joe," the crow, is shown on the right. The Trailside automobile entrance is on the left.

only you don't think about it that way until you see a tree farm like this one."

"Yes," said his companion, "if we pulled up one of these trees, they'd probably jail us! I guess we ought to leave the wild trees alone too!"

Earlier in the year, a Geology Museum was conceived, designed, and built. We have felt the need for a structure of this sort ever since our first contemplation of the Bear Mountain Trails. The geology and mineralogy of the Highlands is exceedingly complex and interesting. It warrants a far more comprehensive treatment than we have previously been able to give. The new building is in keeping with all of our other structures. It is made of glacial boulders. The planting nearby and the design of the structure itself present a very pleasant picture.



Photograph by LeRoy Davies

TRAILSIDE CRAFTSHOUSE

This new building, constructed of glacial boulders, housed the trail-making equipment and the crafts exhibit. Here students and campers were encouraged to make their own nature collecting equipment and design their camp museum displays. The fish pool in the foreground was another added feature this year

The interior space of the Trailside Geology Museum is divided into two sections, one for exhibit and one for office and laboratory. Our plan was to exhibit representative rocks and minerals of the region. Mr. Robert G. Bispham, our geologist, visited many abandoned iron mines and other mineral localities in the Park, and by mid-August was able to show a fairly complete collection, including a fine group of graphite specimens discovered during the construction of the George W. Perkins

Memorial Highway over the top of Bear Mountain. We were pleased to observe that our visitors showed an immediate interest in the display.

Another addition to our tract, for which we are very grateful, is the new stone Craftshouse. Here we may construct cages, build models, and perform the thousand and one other tasks connected with nature trail and museum efforts. We have a crafts exhibit here too and, in addition, we encourage campers and others to use this room as a laboratory, or as a shop for their own work. Inasmuch as the trails and the Geology Museum are to be kept open all winter for the first time, we moved many objects from the Trailside Museum and shall maintain the exhibit in the new Craftshouse during the cold months. Mr. Anthony L. Roos has charge of our work for the winter. He has been of great assistance to us during the entire year, as has Mrs. Roos, whom we thank for her many volunteer services.

One very heartening aspect of the reactions of the public to our trails and museums, new and old, was the longer and more frequent visits observed during the season. We established friendly contacts with so many persons, that some Sunday afternoons had the general air of Old Home Week! Visitors from far and near would return again and again, bringing new recruits. Upon each occasion, conversations overheard were enlightening.

There was one individual who proved to be the head of the Biology Department of one of New York's largest High Schools. We had answered his questions on several week-ends, had given him collections of local minerals, and had made him generally welcome. He would arrive with his friends and we could hear him guiding them about: "I want you to see the Craftshouse," he would say. "That's where they do all the work. There's a copperhead in there too!" And again, "I wish my students could study biology here where everything is first hand."

One woman, returning to New England from the Chicago World's Fair, later exchanged a collection of geological specimens with us. She proved to be a member of the staff of the Hartford Children's Museum. We were hosts to many persons who were bound to and from the Fair. As a direct result, our correspondence grew steadily. We were pleased to observe that our work was of increasing influence in many communities at home and abroad.

Letters from Japan and from Sweden, Austria, England, France, and Germany told of out-of-door museums in those countries. Extracts from previous reports of our Bear Mountain work, translated and quoted, came to us from European nations. One letter from Kaposvár,

Hungary, is typical. It said in part: "Under the influence of your work, (i.e., the American Museum's Trailside activities), I want to deal more in detail with education in the out-of-doors. I have written in a Hungarian educational periodical about Nature Trails, with the help of your works, etc." This particular letter was signed by the Secretary General of the County Somogy.



Photograph by LeRoy Davies

THE SNAKE PIT

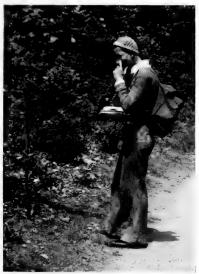
Inverted walls and a water-filled moat prevented the snakes from escaping. The stone island provided a fine demonstration "platform" from which frequent lectures were given to large audiences. The exhibit played an important part in informing the public of the harmlessness of the majority of our snakes.

The Superintendent of an outstanding Park in a nearby State visited us during the summer, photographed a number of our out-of-door exhibits, and returned home to build a trail system of his own. A municipal Bird and Nature Club was organized, and the Superintendent commented that in a short time the Club "created an interest in nature never before known in the city." He continued, "And to meet this demand for

¹Iwan Baron Weissenbach.

knowledge about bird life, plant life and other natural facts, a new department of nature construction has been made." He then told about the nature trail created by the "new department." And so the story goes! The gospel is being spread far and wide.

The new snake-pit, completed this year, is one of our greatest assets in the matter of making personal contacts. The pit is a large, circular, concrete, inverted bowl, with a natural rock bottom and a moat filled



Photograph by George H. Sherwood BOOK, PACK AND LABEL

This young man was a typical nature student. Collecting equipment and food filled his pack sack. The "candid camera" caught him in an unguarded moment as he was supplementing label information with book knowledge.

with water. In the center is a stone island with two small willow trees planted for shade. We had unusual good fortune in securing specimens in the field, with the result that our pit held some fifteen blacksnakes and other varieties of local harmless reptiles.

The railing about the pit served as a resting place for those who watched the pit dwellers. Questions flew thick and fast, as one always expects whenever snakes are concerned. A special label rail and a snake bulletin board, illustrated with photographs, by no means served to

¹See: "Increased Activities During Times of Depression," by Walter L. Wirth, Parks and Recreations, October, 1933, p. 68.

answer all queries. Often we would jump upon the island and demonstrate with the living specimens. Conversations here sometimes ripened into real acquaintance. Frequently books were requested, experiences were exchanged, and much missionary work was accomplished in behalf of the snakes and of our Museum too!

Another favorite gathering place for visitors was the new, large fish pool near the Craftshouse. Several hundred small fish, including sunfish, perch and dace, were exhibited here throughout the summer. Visitors were permitted to stand directly upon the pool's edge, to kneel down for close inspection, and to examine the fish as long as they pleased.

Two electric light bulbs, suspended above the pool and lighted at night, provided food for the pool inhabitants. Swarms of insects gathered about the glowing bulbs, and in their dash toward the light, thousands of them fell into the water, to be instantly swallowed by the excited waiting fish. Major Welch has used the same feeding system for some years, with excellent results.

Our original Trailside Museum was this year redecorated and improved in many other ways. The "Story of Interdependence." confined previously to one corner of the building, this year embraced the entire interior. Mr. Kenneth M. Lewis and Mr. William B. Hoke, Jr., accomplished much toward rounding out the exhibit and making it more valuable to guests. The Report for 1933 described the display as it then existed.

The teaching of reasons for the conservation of plant and animal life continues to be an outstanding objective of all our work. There seem to be four main lines of approach to this problem of education. We strive to develop each one as follows:

- 1. Sentimental, emotional liking for animals, etc.
- 2. Economical logic, (if there is such a thing!)—sound reasons for wild life protection.
- 3. Spirit of fair play—"live and let live," etc.
- 4. Scientific—the "study" attitude.

In our Trailside Museum and along the nature trail we have made many efforts to follow these four lines of appeal. Our very tame Virginia deer fawns were perhaps the best objects of the "sentimental" approach. Their grace and exceedingly winning ways attracted hundreds of visitors. We made it possible for a number of guests to enter the deer pen and play with the fawns. Needless to say, on these occasions many delighted

[&]quot;1Trailside Interdependence," School Series No. 8, Am. Museum, 1933.

"ohs" and "ahs" were heard and, what is more important, the deer gained firm friends. Men frequently exclaimed, "I don't know how I could ever shoot one of those fellows—look at their eyes!"

This type of "first hand" education was carried into other fields and included Joe, the tame crow, and other creatures as well.



Virginia Greets an Appreciative Audience

The Virginia deer fawns, obtained early in the season, proved to be great attractions.

Children were frequently permitted to enter the new deer enclosure to play with the fawns and to become firm friends of these trusting pets.

In the realm of botany, we urged that the beauty of wild flowers was not a thing to be selfishly enjoyed by picking. For years the Park Commissioners have posted large roadside signs, reading:

"DO NOT DESTROY THE WILD FLOWERS— OTHERS WISH TO SEE THEM." Under the heading of "economic logic" we stressed the value of preserving useful plants and animals from a purely mercenary standpoint.

Such signs as

"PLEASE DO NOT CARVE YOUR INITIALS
ON THIS PINE-TREE—THE TIMBER IS
VALUABLE"

were exhibited in a number of places along the trail. Similar "logic" was displayed in numerous other sections, indoors and out.

The "spirit of fair play" had its important part. One sign, among many, read:

"BY WHAT AUTHORITY DO YOU KILL HARMLESS SNAKES? SNAKES ACCOM-PLISH MUCH GOOD—LIVE AND LET LIVE."

In encouraging a scientific approach to nature, we have ever emphasized the fundamental story of the necessity for maintaining the "balance of nature." The "Story of Interdependence" is our outstanding effort toward this end. Here we have attempted to provoke thoughts as to the relationship of all plants and animals. We have shown that a broad view of all things, animate and inanimate, is of profound importance. Thus, our original Trailside Museum, with its relationship accounts, continues to be our foremost teaching agent. It is a monument to the aims and ideals of conservation in general.

For a number of years, then, we have grown increasingly aware of the fact that public education is the very best force possible in furthering the interests of conservation. We know that persons who learn to appreciate Nature in the field become leaders in defence of her creatures. We may well say that the future for the preservation of wild life will be a race between education and catastrophe, thus paraphrasing a well known pronouncement of H. G. Wells in relation to civilization in general.

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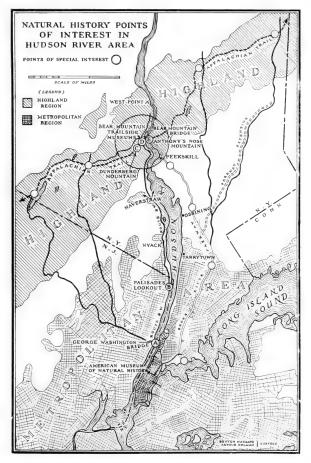
BY WILLIAM H. CARR

- "Signs Along the Trail," (1927, 29 pages, 20 illustrations). Price 10 cents.

 Beginnings of the Nature Trails and Trailside Museum at Bear Mountain,

 New York. Adventures in labelling and building—Botanical, Zoological and Historical Trails.
- "Blazing Nature's Trail," (1928, 21 pages, 16 illustrations). Price, 15 cents.

 How Nature Trails are built—how labels are written. Correlations of trails and museums.



From The American Museum To Bear Mountain The Trailside Area is located within the circle.

"Trailside Conversations," (1929, 36 pages and 27 illustrations). Price, 20 cents.

Live animals and their traits—their care and food. A talk about snakes—the study table—building trailside charts.

"Trailside Actions and Reactions," (1930, 32 pages, 27 illustrations). Price 20 cents. Reactions of visitors to trails and museums—Trailside Psychology—Campers and Nature Trails, animals without labels—building cages.

"Trailside Family," (1931, 34 pages, 27 illustrations and full page map). Price, 20 cents.

Trails and those who build them. Building a botany pool. Animal habit index. "Trailside Interdependence," (1932, 22 pages, 10 illustrations). Price 15 cents.

From Sun to Soil and Plant to Man—an exhibit of relationships—building the Acorn Trail, depression attendance out-of-doors—Nature Trails for the blind.

By Frank E. Lutz. "Nature Trails," (1926, 36 pages, 14 illustrations). Price 10 cents.

The first Nature Trail in the Palisades Interstate Park. Insects along the trail, scientific vs. common names, labels.



Photograph by LeRoy Davies

BEAR MOUNTAIN TRAILSIDE MUSEUM

This building, erected in 1927, is still the focus point of the Nature Trails. It is known as a "covered trail," for in truth it is not a "museum" at all.

Accounts of Activities--Bear Mountain Nature Trails and Trailside Museums in "Natural History Magazine," By William H. Carr

"Trailing Nature," (pp. 312, 318, 7 illustrations, May-June 1929, Vol. XXIX, No. 3).

Descriptions of the trails and museums and those who visit them.

"Animals On the Nature Trail," (pp. 434, 442, 9 illustrations, July-August, 1931, Vol. XXXI, No. 4). Mammals and birds and their care.

"Telling The Beaver Story," (pp. 640-650, 13 illustrations, November-December, 1931, Vol. XXXI, No. 6). An experiment in caring for beaver at Trailside.

- "Adventures With Trailside Insects," (pp. 195-206, 24 illustrations, March-April, 1932, Vol. XXXII, No. 2). Insects and human visitors.
- "Display Cages For Living Insects," (p. 333, 2 illustrations, 1932, Vol. XXXII, No. 3).
- "Trailside Crows and Others," (pp. 313–320, 13 illustrations, May-June, 1932, Vol. XXXII, No. 3). The Crow as a Trailside staff member.
- "A Trailside Convert," (pp. 278–286, 11 illustrations, May June, 1933, Vol. XXXIII, No. 3). A fisherman's Trailside visit and his reactions.
- "Two Thousand Miles Along The Crest of The Atlantic Highlands," (pp. 395-408, 21 illustrations and 3 maps, July-August, 1933, Vol. XXXIII, No. 4).

 A proposed series of Trailside Museums and Nature Trails along the Appalachian Trail system.
- "Peter Poses," (pp. 545-552, 11 illustrations, September-October, 1933, Vol. XXXIII, No. 5). Adventures with a tame flicker—a Trailside exhibit.
- "Trailside Fawns," (pp. 151, 160, 10 illustrations, March-April, 1934, Vol. XXXIV. No. 2). Experiences with White Tail Deer fawns as pets and exhibits.
- Note: "Natural History Magazine" is the Journal of the American Museum of Natural History and is published bi-monthly.
- Note: Address orders for any of the above to the Librarian, The American Museum of Natural History, 77th Street and Central Park West, New York City, N. Y. All payments must be made in advance, and 3 cents additional postage must be sent for each pamphlet.



